

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **2001208981 A**

(43) Date of publication of application: **03.08.01**

(51) Int. Cl.

**G02B 21/24**  
**G01N 21/64**  
**G02B 7/16**  
**G02B 21/06**  
**G02B 21/16**

(21) Application number: **2000373238**

(22) Date of filing: **07.12.00**

(30) Priority: **07.12.99 US 1999 456228**

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(54) **OPTICAL SYSTEM SWITCHING DEVICE, AND  
FILTER CASSETTE USED THEREFOR**

(57) Abstract:

PROBLEM TO BE SOLVED: To obtain a filter cassette for vertically illuminated fluorescence microscope to which many filter sets can be attached and which is designed to be made small in size and reduced in occupancy space.

SOLUTION: This filter cassette is a turret type filter cassette capable of switching plural exciting/absorbing filters 20 and 28 and a dichroic mirror 22. The filters 20 and 28 and the mirror 22 are directly attached to a turret 106. The turret has shape obtained by cutting the acute angle part of a polygonal pyramid (octagonal pyramid) with a rotary shaft as a center shaft by a plane orthogonal to the center axis, and pyramidal surfaces equally divided eight are arranged to form an angle of 45° to an illumination optical axis 18 and an observation optical axis 35. A through-hole for securing the optical path is bored on the cones arranged to form 45°, and the mirror 22 is attached

to cover the hole so that its surface on an opposite side to its reflection surface may be attachment surface.

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